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Application No: 09509712 Version No: 1.0

Input Set:

Output Set:

Started: 2008-10-17 14:12:35.466
Finished: 2008-10-17 14:12:37.703
Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 237 ms
Total Warnings: 0
Total Errors: 0
No. of SeqIDs Defined: 127
Actual SeqID Count: 127

<110> APPLICANT: Rubin, Donald H.

Organ, Edward L.

DuBois, Raymond N.

<120> TITLE OF INVENTION: Mammalian Genes Involved in Viral
Infection and Tumor Suppression

<130> FILE REFERENCE: 01123.0004

<140> CURRENT APPLICATION NUMBER: 09509712

<141> CURRENT FILING DATE: 2000-03-31

<150> PRIOR APPLICATION NUMBER: PCT/US98/21276

<151> PRIOR FILING DATE: 1998-10-08

<150> PRIOR APPLICATION NUMBER: 60/062,021

<151> PRIOR FILING DATE: 1997-10-10

<160> NUMBER OF SEQ ID NOS: 127

<170> SOFTWARE: FastSEQ for Windows Version 4.0

<210> SEQ ID NO 1

<211> LENGTH: 925

<212> TYPE: DNA

<213> ORGANISM: Rattus norvegicus

<220> FEATURE:

<221> NAME/KEY: misc_feature

<222> LOCATION: 1- 925

<223> OTHER INFORMATION: n = g, a, c or t (u)

<400> SEQUENCE: 1

gggggaaaac cngnaattg tttttgacg anccaaaaag gggncnagna gcnnntntcc	60
tanatgggn cgggatcntn tccnaggana gattnatgga gtatncctt tttgcncaa	120
ggttgattgc tcttggaaagg ntggaggtg naattcctcc gtnagttga ccgttagtcgg	180
atntgaagag ggattgttna gcagncataa tttcattccc tgnacaccca gtaacnntt	240
accgtcattt ggttggaaat tgatntcggg aggtancaan ggccacagtt atttattgtt	300
ncggaggatt gcaccaattn ggccggctgc ctctganatc tgtttctcat ccatgccggt	360
tcacccagac gaaagccgaa agcnctggga gtcctaactn tagtccntga aagtcatc	420
cagctcgta attgggctgt gcagagtcgg agctcggtaa atatttgcgg cgtgactgag	480
ctggagagaa tgctccttgc ttggcctgg gcagctctg gcagctcaca tgcactgttt	540
acctatcctc ccacattccc ccctgaggaa tcatcggtcc tcgggtccct taagtccct	600
caacagaaaa caaggcagag tggaacgaag gaaagtgcgt ggccgttaga aagcctgtct	660
cgaatctgtc ccacgtgcct caggtgcgt tccaaacagc aaagattcta gtgaagaaaa	720
ataccgtccg gtcaattagt caggtggaca gagcaggacc cgggtgtctg gaagcctcgt	780
ccattcctct gggaaagggtg gggggggcg tgtaatgcag ctctcaagaa gaaggatatt	840
ttgtttcct ggagaaactg ccatcccagg agctgagagt ggatcagtag gaaggcctgt	900
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<210> SEQ ID NO 2

<211> LENGTH: 554

<212> TYPE: DNA

<213> ORGANISM: Rattus norvegicus

<220> FEATURE:

<221> NAME/KEY: misc_feature

<222> LOCATION: 1- 554

<223> OTHER INFORMATION: n = g, a, c or t (u)

<400> SEQUENCE: 2

caagatngan gggcgccgg ttcgnccaga gagcggttag ggaaggaaac gcgccggatg	60
agccngggtg cgganagcca gaccccaggc gtggaaaggag gagagagata gagcgcccg	120
ttggaaaggag gaggaccgtg gttnataaat aacagaaagc ccagagggac gtanccatcc	180
gggatggaga gaggtaggaa atccagntgt aagtccaaa ctgccaccac cttcatnaga	240
actgcttcgt gtaaggtcac gcaccggcc agctgtccng agtggcggtc ctggcggtt	300
aagttagcta aagtnactgc aactccgnct gtgcagactg ntctgtcc	360

gccaaattct ccctcctatt aaactttca cttccttca cttagttcc tnactcttt	420
caaacggaag ctgtaactga gcctgccacc cnganacntt gtgggtgcca ttttatgct	480
aaagtaatcg tgaaaaatgcgcctttat gcctgtcaac tccctttca tntaaagcag ggcntaccct	540
attataactc tgcc	554

<210> SEQ ID NO 3

<211> LENGTH: 891

<212> TYPE: DNA

<213> ORGANISM: Rattus norvegicus

<220> FEATURE:

<221> NAME/KEY: misc_feature

<222> LOCATION: 1- 878

<223> OTHER INFORMATION: n = g, a, c or t(u)

<400> SEQUENCE: 3

ttngaaanaa tttccgtcaa ggtcngaat nggccccgga aaaaatgngt tcctccac	60
cttcattggc gcggatcctg ccngggaggc caatggtta acaaataatc tttnggagnt	120
ntggtnnnnn ggggaggggac nccacagan tcatnggtg gttnnnnnngg nggcatcgt	180
tnngatatta tcacatntg ngaanctatg tnngggcttc cttcngaca ggtgggtt	240
nnacangnnn atgtgtgctt ctttttcag cagtggtgaa cccggattct aagaccctta	300
cngtaacaat gccctnttt cctaaggcta accagtcctt tangaggant gctctgggn	360
accatgctg nntcacctag ctttggnca catntnnac acaggaaaag gcagcatgtc	420
ttntnggagc tcagcttatt ccctccctt cccatccagn atctccctgg gntggatgag	480
gtggatgacg catcttcaaa gcacccacg tntcatgggatgtgcacagg agcttcgtt	540
gaaatgtgtt ggcgcgaccag gcttgtgttag gaaacaacag actactcgaa attaaagtcn	600
taccttgcag gtttctcaga ggctttacg cattaataaa catttgaatc ntaagaagg	660
agcacagcat gtaatattnt tcaaattatc aggcnntgca accttcattt gtttcttta	720
cgcagctggg ngtgggtgtg ttttcccttta atctcagcac tgaggaggca cngatatctc	780
catctctgtg acttccagac cggcntcgcc agagcaagtt ccaggccacc cagatgagat	840
gctcacagag gggaccttt tntgatgacc aacgnagnat gcaagtaagg a	891

<210> SEQ ID NO 4

<211> LENGTH: 974

<212> TYPE: DNA

<213> ORGANISM: Rattus norvegicus

<220> FEATURE:

<221> NAME/KEY: misc_feature

<222> LOCATION: 1- 974

<223> OTHER INFORMATION: n = g, a, c or t(u)

<400> SEQUENCE: 4

aaaanaanat attccgnntc tnntagcnna gaagtntnc gagcnntccc ccgtnttttt	60
aaaaaaccnc ggattccggn nntcgggntt taanngntt tttaanggcc cnaagnccn	120
nttattgccc ncnttcccc cccgctnttgc cncccttta ctngagant ngtgnncna	180
agattttaag gttnttgccc ccccggttt tnttccctn ntttcccn nagntttaaa	240
accggtnntgg gttncnattt nnttgnanc nccnattggg gtttccgntt accngggttt	300
ttccccatgn ccgttccctc caatnttgnat cttccnggt cnggtccna atnccnngna	360
acngntcnn ccttatttgc aattaatttt tccttgnna ntctgnccccc cngnatttg	420
gggttcttgg gngcaggccc ttttttctt tggngcaan cncataaaatn ttaccagntt	480
gattgctaag gaagtancat tgggttngaa cccccccttntt tnttctccca gatggaaacc	540
aggattttgg aactgcagag gcttcagggt ctggaaagc ggaggcagnn aaagattgga	600
gtgcactgtc ctttgcaat atgggttttgc cctgcctgct ggctcntctc ctgctntntc	660
agatggtgac tgaggctact tcngcaggac tnggaataat catgtccagg tggctgcct	720
tccgagcaga aaggacaga cgtggggcga tgaagttgtatcgatntt ttttttctg	780
cacagactgc aaagtgtgca gagggaggga ggctgtgcaaa aaaaaaaaaaaa aaaaaaaaaaaa	840
aaaaaaaaaaa ccgaggacgc agaagtttaga ctgctgaccc atttggtgca tgggtgccc	900
tggagggagg ggaccttntt taaagggttc acgcggcacg cantggnaa nngnnccnt	960
acgnnnctcc caga	974

<210> SEQ ID NO 5
 <211> LENGTH: 850
 <212> TYPE: DNA
 <213> ORGANISM: Rattus norvegicus
 <220> FEATURE:
 <221> NAME/KEY: misc_feature
 <222> LOCATION: 1- 850
 <223> OTHER INFORMATION: n = g, a, c or t(u)
 <400> SEQUENCE: 5

antttccct	caagnaaant	ntggttggg	caacttgaag	acgctnnac	cnaaaaccct	60
tgnngagntt	ggngacctn	ttaccgnaan	gagtggaaa	cgtttcctc	cgggttnang	120
gttaggggaa	cccgnggaa	aatttaaaa	ccnnngggc	ttttcgaat	taagggaaa	180
ngcggttng	gtnnntgaag	ggcgggnggt	tggagtcnna	gtccagagtt	gatttccacc	240
cacaatntg	ggaggtgnrg	ggaatgntg	ncntttctt	ngatgaggg	ntgccgtncc	300
ggantaacag	ngnttgcntt	gtntngcnaa	acgaagagtn	tcctgnttgg	aataggngtt	360
cngttcgang	gancagatt	tangngntgg	agnaaggatt	ngcagataa	angcntgaga	420
natgnancnt	ggancaggtc	nggnncnagn	ntacagatga	tgnncccana	canganataa	480
ntncagatca	cagtcgtacc	cgnngctggg	ccatgaanag	ggcatcccc	gacnnacaca	540
ngccttnana	antgntcaga	gaaccancag	tggntanggg	ntgcccnnn	naccaggaa	600
gaccggggc	gtgnccgata	ttgacacanc	agatnnatt	tggggncggt	tcgagggttn	660
atgntcnccg	agtacnagan	angatcntcc	aaccggaaat	ncgggtgctcc	ngtctgtccga	720
tgnatgagt	cgnccggnaa	cctcatatcc	aagaaacnat	acagcagtgg	nntccgagtc	780
tcgtatantc	nttgcgggng	gaggctatnt	tcagaggnc	agattaccgt	tagcgggana	840
aagtngaana						850

<210> SEQ ID NO 6
 <211> LENGTH: 531
 <212> TYPE: DNA
 <213> ORGANISM: Rattus norvegicus
 <220> FEATURE:
 <221> NAME/KEY: misc_feature
 <222> LOCATION: 1- 531
 <223> OTHER INFORMATION: n = g, a, c or t(u)
 <400> SEQUENCE: 6

ttgnggcngg	gtctcctctg	ngtgngngtn	tcccnanag	ggggggtctc	acagtgttnng	60
ngtctnntgt	ctgtgtngtg	cccctgtccn	catctctcac	nccagggaga	gagatgtgag	120
ananacatca	gagatctctn	gnacagtgtt	tcacaagagt	ctatcncana	gagcacatct	180
gccccggggng	anacacaact	ctaaatgtgt	ctcanntgat	ctctctnttg	tgtctctnac	240
atatgnggac	atgctctcag	agtatnggnt	ctctgngcn	ctntgcaca	cacacacaca	300
cacacacaca	cacacacaca	cacncttctc	tctggcacag	ggntatggca	nagcacatnt	360
tnngagntca	nagctntata	tgagtgtgtg	gcaaaaggng	tatnanann	gacnncccca	420
gcnnatatag	gggggngnnnc	tctngggctc	tcttnggnna	tntgngggng	agtctgcnca	480
cacaggcgct	cnnaccanc	nnnttggggc	ccccagggng	ttttcnccc	c	531

<210> SEQ ID NO 7
 <211> LENGTH: 572
 <212> TYPE: DNA
 <213> ORGANISM: Rattus norvegicus
 <220> FEATURE:
 <221> NAME/KEY: misc_feature
 <222> LOCATION: 1- 572
 <223> OTHER INFORMATION: n = g, a, c or t(u)
 <400> SEQUENCE: 7

tttttntgtg	gcccttaaa	ctctgngtgn	ccgtntnccc	nagagggggg	gtctcacaag	60
gagacancgg	nnacacagag	gttttngnn	tattngagtt	ctctgcgcac	nccananttt	120
aaccncgggg	nctcntgttt	tatttaaaa	aaaaagagtc	ncatgtntat	ttctctnatg	180
tgaaaatcnc	attcanagtt	ntggggttc	ccntgaggag	anatagagtt	tcacacttt	240

ctctccgagg ggtcntcnca tgtntctccc caatgtgn gnacacaca tngggccccn 300
aggggggtgng ctctctctgc ncagggcncc ccccaanang tagaganaca ntgtgggtg 360
tcacaacaca attcnccgaga nattntgttc cncantggnn gtctnagntc ncatgttgc 420
gngacangtt agnnncnccc atnttcnccc cccttcaca ctgccccnag agagagaaan 480
tctnggcccc ctctanannt nttttaaat cncccnac cacaggtntt cccagggat 540
gngacntcnca cnncncnca aaagatntgc nc 572

<210> SEQ ID NO 8

<211> LENGTH: 906

<212> TYPE: DNA

<213> ORGANISM: Rattus norvegicus

<220> FEATURE:

<221> NAME/KEY: misc_feature

<222> LOCATION: 1- 906

<223> OTHER INFORMATION: n = g, a, c or t(u)

<400> SEQUENCE: 8

tggaggtctc tctcatatgg cgcntcncc aaagggngt ctctntccng agncgcanac 60
gchgagaanac tctgtnnant ngtctccccc cncnccnaca gngtganant caaaacctct 120
agagccccc agaaancccc tntctcaa an aaagagaaag agaagancga gnagnagaga 180
ganaganaga gagagagtgt gganctntnt cctcngancc ccannnanan ngtgnggcnc 240
actcncnngt gnngngnacc ccnggggatt tncgcgtgtc cccttngct ctgtntanga 300
ganaganatag tntagtctct ctntcgcctt ctccgntgtc acgtgtgcgg ggcccnngag 360
acacagacac ntctctcang gggAACACAT anngactcnc acntgtgttt atattcnccc 420
ctcccncnca cacanacaca cacacagnag atattnngct actctctctc tgtcacaggg 480
gtacanattt antctnggc anaccctct cngaaagngng ggcannngtaa accccgcccc 540
ctctcngaga angngaggc gntttacntt cccngtggcg tgcngngcc cccgagactc 600
cccttngnac cccctntna accctctntt tgaacncaac ncaccntccc ntntctcg 660
gggnnggncc ngcncncnct ctncncaaaaa aaattnnaan ttngtcccct ncccnntnt 720
ttcnggnana aaccgtgtcc ggggggggan nacttttt tgncttaaa atcaantttt 780
ttccctttt ccnggggacc cccgnnttcc ttttaaaaaaaa aaaanaaccc tttctccctt 840
ttaaaaagnac ccntttttc naaaaccgtt ccgnatttaa ttccttaatt cccttccccn 900
ncccg 906

<210> SEQ ID NO 9

<211> LENGTH: 914

<212> TYPE: DNA

<213> ORGANISM: Rattus norvegicus

<220> FEATURE:

<221> NAME/KEY: misc_feature

<222> LOCATION: 1- 914

<223> OTHER INFORMATION: n = g, a, c or t(u)

<400> SEQUENCE: 9

gggatgngcc ctcagatcaa tacacccctc nggggngt c tctctctatc tcccnagna 60
gactccatc tctntntntn cccccaganc tggngaaacgg ngtgtggng nccntntctg 120
ttctcnantc tctaaaagng cnaaaagcgc ananacacgn gcctctctat anatctcag 180
tgtcccnngn nctctcngac ccctnntctg tntgagagac accctntctc aaaatatagt 240
gtacacgngc tttgnggctc tccctttt tctccactnt tgagngngaa acgcggngtt 300
ntctctgaga tgcgtanagn gtcctctct cnatatatgt gttncctact ccnnaggng 360
tctcataaaaa atcncntntc tcaacaccac cncctcnacc ccccnacgaa gaacacntcn 420
ccaccncnan gacacaaana naaggngtnn anaacccan aaaaactnng ntntcngntt 480
tacacacaca cacacncacn ctncnccaca cccccacnna aatggagaa aaaaacagaga 540
ggngtgggtg ttngnntcaa cacnntta cctctctgt gnnanttgag aaaatattc 600
tntncttacc cctctccct ctctgtgtgt ngannatatc ngntctagat gtcctnaccc 660
tccccaaacc tttctcnggn agagacntct ctntttttt ccccncttc catttgaan 720
anangagaag gnccaaaaag gngggngtct tctcgaaat ncncctttt ggccccccaa 780
cctgggtttt tttccccctt cctttaatn anttttcna nacaanctt tnngngttt 840
ggaaaaangcc tttnnctgnn nntttttcc cttcccttt tnnangggnt tcccccccccc 900

ccngaatttt tttt

914

<210> SEQ ID NO 10
<211> LENGTH: 400
<212> TYPE: DNA
<213> ORGANISM: Rattus norvegicus
<220> FEATURE:
<221> NAME/KEY: misc_feature
<222> LOCATION: 1- 400
<223> OTHER INFORMATION: n = g, a, c or t(u)
<400> SEQUENCE: 10

ttcctgggtg	cggcttcctc	tgagatagt	tgatccc	tat	aggggggg	tcactt	tcactt	60	
acagtttat	g a a t t a t t a	catat	ttcac	a a g a c t	t t t a t t a a	tat	gcct	cat	120
gtgagatata	tgtgattctg	tggtgg	gtt	ctcagagg	gg	gtt	gggt	ta	180
tagttgccc	ctcgcg	gggt	ctatattt	atatgt	gaca	caat	atatta	gagagat	240
tggttatata	tattcc	ttt	cgcgggg	gtg	gagatt	tatc	acagg	ggag	300
ttgttagcaa	aagtcc	ctgg	tctcg	tccc	catct	ccaa	aaaaaaa	atgtgaaa	360
aaaaaaaaaa	aggccc	cctc	ttgag	tgat	tg	cccc	ttt	tttt	400

<210> SEQ ID NO 11
<211> LENGTH: 880
<212> TYPE: DNA
<213> ORGANISM: Rattus norvegicus
<220> FEATURE:
<221> NAME/KEY: misc_feature
<222> LOCATION: 1- 880
<223> OTHER INFORMATION: n = g, a, c or t(u)
<400> SEQUENCE: 11

acccaatctt	nanggtggca	gtgn	gnnga	tcttaac	gggt	ttt	nagaaa	aaaaantnct	60
tcgctcncac	ccccaa	ggct	cccn	tttctta	ncag	ctttt	tat	angaaaaa	120
cggaaatttta	aaaaccgtcg	ttagagg	aaa	tgaagg	ttca	gccgacc	att	ac	180
aatgaaggtn	ttccggagg	gg	ttgc	ccttcca	atcc	aggat	gtt	tcaggat	240
ttcagttacc	gntgaccat	cac	nnnc	ctc	cngt	tataat	c	atngat	300
gagt	gagt	ga	tgt	gtat	gtat	gtat	gat	gat	360
tgtctcagtc	cacattaagg	tttgc	cctgna	aatt	agt	tgca	taag	ccat	420
cttttcnnac	acaattaata	gt	ntctt	ant	cct	ccc	atc	ttct	480
tccaccacag	gtctgc	agcg	gg	ctac	agct	tcc	ag	caact	540
ggagaaaaatt	ccagtcc	agg	at	gtc	atgg	gg	gg	g	600
gctcattcct	nacatgg	gt	tgt	ctt	c	tcttgc	ctag	cct	660
gtaagcttga	ttt	gat	ttc	act	gct	gact	gg	gat	720
ccatctctct	ctctaac	ctg	aaat	cct	tag	tatt	ttt	cacc	780
agcagagat	g	ag	tcc	aa	gt	tt	gag	gat	840
gcgaaagncc	ccaca	aaagnn	ttt	gg	caag	ttt	gg	caag	880

<210> SEQ ID NO 12
<211> LENGTH: 909
<212> TYPE: DNA
<213> ORGANISM: Rattus norvegicus
<220> FEATURE:
<221> NAME/KEY: misc_feature
<222> LOCATION: 1- 909
<223> OTHER INFORMATION: n = g, a, c or t(u)
<400> SEQUENCE: 12

cngagnng	cagg	gnna	gg	nggg	ggag	cn	ng	agg	agg	60
nngn	gagn	naa	cg	gg	gg	nn	nn	ng	ng	120
nagac	gg	gt	gc	gg	gg	gg	gg	gg	gg	180
agcnn	aa	anc	gagg	gn	gg	gg	gg	gg	gg	240

gngagcggna	gnggnnaaac	tgggaaacga	gacagacggc	cccnncggng	gcangnggga	300
gagnnnncgcc	agngagagna	gnagnanca	gancanggga	ggggggggan	ncacnggcgg	360
gagggncgan	gacggnnnngn	anngnnaga	ggcannnnnc	gccnanagng	ngaagngagg	420
cangagtnc	gcnnngagnag	acaggcccgc	gcncgggggg	cagacnnngg	ncaccaccga	480
gggtgggngg	ggcncggaga	naagaccaga	ggnngaggg	cganggcng	ggttnngcccq	540
ggccncccna	aaaaaanncc	gaaaaaaaaan	aaggggcgcn	gcngggcngg	ggaggagcgc	600
tnnncgtang	tngantgacg	gaggcngna	atngggccgn	gccanncnag	ggcgnagagg	660
cccaagngcg	gnaggnnaa	gnanagancc	ngnnggtngg	gagnganagn	gcnnngnncc	720
nacccccn	gttganggcn	cccacgnccg	ngcaggccgn	nnaaagngag	tccccnaaaa	780
nntcnggtn	tnacancgnc	ccggggncgc	cgcngngtcc	cgncacacng	gannncggag	840
anngcctnnt	ntctncacan	ggngccanac	nngntgctat	gcaaaagggg	cgnacttcna	900
aaaaaaagnc						909

<210> SEQ ID NO 13

<211> LENGTH: 927

<212> TYPE: DNA

<213> ORGANISM: Rattus norvegicus

<220> FEATURE:

<221> NAME/KEY: misc_feature

<222> LOCATION: 1- 927

<223> OTHER INFORMATION: n = g, a, c or t(u)

<400> SEQUENCE: 13

cctttattcg	gaggcaggga	nnncttgtcc	gggaangtta	aacgtttttt	aaaaggggggn	60
ncccnngggg	gggggntnt	ccagggaa	aaaanggtgn	gttgggggg	aaaaatttat	120
tttnaaaaag	ggcgncnat	ataaangacn	ttcggggggg	tttgaanagg	gccggaancn	180
tcgacgggtt	tccggnggg	ganaaggana	agggnacgca	cgggatttct	tnccctttt	240
tngcaaattg	cngcaggana	ccaccgggtg	gggnngtttt	gttttccgtn	aagaaagcgg	300
gngtggaaaa	acanggataa	acgggaagan	ggggttattt	ngtttagnaa	ttgnttccag	360
ngngccagg	aaattggcct	gtccaaaatt	ctttcccng	cttttaagac	aggcaggtat	420
tatttggcag	caggttatta	cnataggnaa	gtaaataaca	atggtaagt	gcctggcaca	480
ggccaggta	agttagggcat	gtatggaatg	ttaaacatta	cccttcatcc	tgagaaanaa	540
aanacaagna	anaaaggctg	gtctcacata	tcccaaagct	ttatcttcnt	aggtgcccc	600
tggtaacgt	taagccaagc	ntatgantca	caagggacga	catggcagg	ntagggtaca	660
gaatcagtgn	tcagagactc	caggggcacc	cctgattccc	tttgcgtgtca	cacagacact	720
gctccaggg	caaccctccg	gatgtgagta	tatgacttcc	tgtatggtac	gctgccgtga	780
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